0.2 µm *AseptiCap NNZ* Positively Charged Nylon-66 Membrane Capsule Filters

mdi Membrane Technologies

mdi *AseptiCap NNZ* positively charged Nylon-66 membrane capsule filters are absolute retention filtration devices for sterilization of liquids.

The positive charge of the membrane offers enhanced capability to retain negatively charged contaminants such as endotoxins and debris even smaller than the membrane pore size rating.

These filters are biologically inert, autoclavable, heat resistant, exhibiting wide chemical compatibility, and are suitable for a large number of filtration and sterilization applications including ophthalmic and injectable solutions.

Special Features

- Positively charged to retain contaminants smaller than pore size rating
- High flow rates and throughputs
- Minimal extractables
- High heat resistance
- Wide chemical compatibility
- Absolute reliability
- Biologically inert
- Hydrophilic

Microbially Validated as per ASTM F 838-05

Complies with USFDA 21 CFR Part 210.3(b)(6)

Meets and Exceeds USFDA 21 CFR Part 177.1520

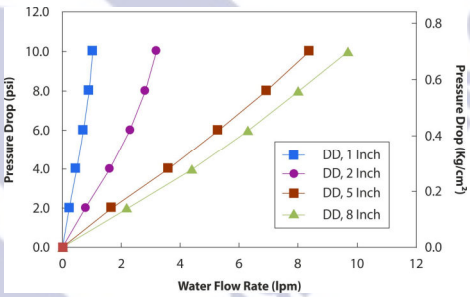
Application

- Filtration of pharmaceutical solutions
- Sterilizing filtration of wide variety of compatible organic solvents
- Sterilization of laboratory disinfectants
- Filtration of buffers and other non-aqueous solutions

Integrity Test Data (50 % IPA)

Bubble Point	≥ 17 psi

Typical Water Flow Rate



Specifications

Material of Construction
Housing – Polypropylene
Filter Media – Positively Charged Nylon-66 membrane
Drainage Layer - Polyester

Maximum Operation Pressure
≤ 4 Kg/cm² @ 30° C

Maximum Operating Temperature
80° C @ < 2 Kg/cm²

Retention Efficiency
LRV> 7 for *B. diminuta* ATCC19146 per cm²

Biosafety
Passes Biological Reactivity Tests , *In Vivo* for Class VI of plastics as described in USP <88>

Sterilization
Capsules are:
- Ethylene Oxide sterilizable
- Autoclavable at 125° C for 30 minutes, 1 cycle. Cannot be steam sterilized

Oxidizable Matter
Passes test as per USP <1231>

Extractables with Water
Passes NVR test as per USP <661>

Fiber Release
Complies with USFDA CFR Title 21, Part 210.3(b)(6)

Particle Release
Complies with USP <788> test for particulate matter in injections

Ordering Information

Type		Size		Pore Size		End Connection		X	Bell		Sterility		Pack Size	
	Code		Code		Code		Code			Code		Code		Code
AseptiCap NNZ	DNNZ	1"	51	0.2 µm	01	¼" SHB	A		Yes****	B	Non Sterile	1	1	01
		2"	52			¼" MNPT	B		Bell with cover****	C	EO Sterile	2		
		5"	53			½" MNPT	C							
		8"	57			½" Hose Barb	D		No Bell	X				
						1½" Sanitary Flange	E							
						¾" Sanitary Flange	S							
						Quick Connector	J							
						Single Step ½" Hose Barb*	Q							
						Female Luer Lock	U							
						Male Luer Slip**	W							
						3/16" Hose Barb***	N							
						3/8" Hose Barb*	I							

*Single Step 1/2" Hose Barb and 3/8" Hose Barb connections are not available in 1" capsule filters
**Male Luer Slip end connections is available only in 1" capsule filter as outlet
***3/16" hose barb end connection is available in:
- 1" and 2" capsule filters as inlet and outlet
- 5" as outlet only

****Bell or bell with cover is available with
-1/4" outlet in 1" capsule filter filters only
-1/2" Hose barb outlet connections in 1",2",5" and 8" capsule filters

Example							
DNNZ	52	01	BB	X	X	1	01

Datasheet DST DNNZ01X1330C

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AseptiCap NSZ
0.2 µm, Positively Charged Nylon-66 Membrane Capsule Filters

mdi positively charged Nylon-66 membrane capsule filters are absolute retention, serial filtration devices for sterilization of liquids. The upstream layer with larger pore size protects the downstream final layer for enhanced throughputs.

The positive charge of the membrane offers enhanced capability to retain negatively charged contaminants such as endotoxins and colloids even smaller than the membrane pore size rating.

These filters are biologically inert, autoclavable, heat resistant, exhibiting wide chemical compatibility, and are suitable for a large number of filtration and sterilization applications including ophthalmic, and injectable solutions.

Special Features

- Positively charged to retain contaminants smaller than pore size rating
- High flow rates and throughputs
- Minimal extractables
- High heat resistance
- Wide chemical compatibility
- Absolute reliability
- Biologically inert
- Hydrophilic

Microbially Validated as per ASTM F 838-05

Complies with USFDA 21 CFR 210.3(b)(6)

Meets and Exceeds USFDA 21 CFR 177.1520

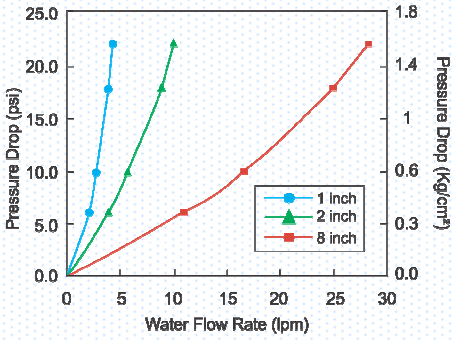
Application

- Filtration of pharmaceutical solutions
- Sterilizing filtration of wide variety of compatible organic solvents
- Sterilization of laboratory disinfectants
- Filtration of buffers and other non-aqueous solutions

Integrity Test Data (with Water)

Bubble Point	≥ 50 psi

Typical Water Flow Rate



Specifications

Material of Construction
Housing – Polypropylene
Filter Media – Positively Charged Nylon-66 membrane
Drainage Layer – Polyester

Maximum Operation Pressure
≤ 4 Kg/cm² @ 30° C

Maximum Operating Temperature
80° C @ < 2 Kg/cm²

Retention Efficiency
LRV> 7 for *B. diminuta* ATCC 19146

Biosafety
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Sterilization
- Ethylene Oxide sterilizable
- Autoclavable at 125° C for 30 minutes, 1 cycle
- Can not be steam sterilized

Oxidizable Matter
Passes test as per USP <1231>

Extractables with Water
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Fiber Release
Complies with USFDA CFR Title 21, Part 210.3(b)(6)

Particle Release
Complies with USP <788> test for particulate matter in injections

Ordering Information:

Type	Code	Size	Code	Pore Size	Code	Inlet/Outlet	Code	X	Bell	Code	Sterility	Code	Pack Size	Code
AseptiCap NSZ (0.45µm Upstream)	DNZX	1″	51	0.2 µm	01	1/4″ SHB	A		Yes****	B	Non Sterile	1	1	01
		2″	52			1/4″ MNPT	B		Bell with cover****	C	EO Sterile	2		
AseptiCap NSZ (0.8µm Upstream)	DNZ5	5″	53			1/2″ Hose Barb	D							
		8″	57			1.5″ Sanitary Flange	E		No Bell	X				
						3/4″ Sanitary Flange	S							
						Quick Connector	J							
						Single Step 1/2″ Hose Barb*	Q							
						Female Luer Lock	U							
						Male Luer Slip**	W							
						3/16″ Hose Barb***	N							
						3/8″ Hose Barb*	I							
EXAMPLE	**DNZX**	**52**		**01**		**JJ**		**X**	**X**		**1**		**01**	

*Single Step 1/2″ Hose Barb and 3/8″ hose barb end connections are not available in 1″ capsule filters
**Male Luer Slip end connection available only in 1″ capsule filter as outlet
***3/16″ hose barb end connection is available in:
- 1″ and 2″ capsule filters as inlet and outlet
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****Bell or bell with cover is available with
-1/4″ outlet in 1″ capsule filter filters only
-1/2″ Hose barb outlet connections in 1″,2″,5″ and 8″ capsule filters

Datasheet DST DNZXXXX1510C

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